

Please amend the Specification by replacing the following paragraphs:

[0026] An end plug mounting member 38 is fixedly joined to the flexible tube 12. This member 38 is preferably turned from stainless steel and includes an end portion 40 which is sized to frictionally engage the inner surface of the flexible tube 12. An attachment ring or collet 42 made of a softer metal, such as copper, is then crimped or swaged into place over the flexible tube 12 to create a secure connection. The mounting member 38 includes an internally threaded portion 44 which engages an externally threaded portion 46 of the transparent end plug 36. Elastomer o-rings 48, ~~50~~ 49 provide a seal on both sides of the threaded engagement.

[0037] Fig. 5a shows a preferred version of the detector head which includes a head block 54' that mates with an external housing 112 that is designed according to industry standards to provide a substantially "explosion proof" enclosure. The head block 54' receives the transparent end plug 36 and couples to the outer casing or sheath 22 in substantially the same way as the first embodiment described above. The head block ~~54~~ 54' may include a substantial annular flange 114 that couples via bolts 116 to a flange 118 that is part of the explosion proof outer housing 112. An elastomeric o-ring seal 120 may be provided to

include a water tight coupling. Within the outer housing 112 there is an inner housing 60' which encloses the photomultiplier tube 14 and amplifier (not shown in this figure) in substantially the same way that housing parts 60, 62 function in the above-described embodiment.

[0043] Referring now to Fig. 6b, an alternate piston design 168 is shown. Additionally, it is provided with a guide rod 170 that may be threaded 172 in place in the second head closure member ~~164-prime~~ 164' for filling of the scintillation chamber. Thereafter, the guide rod 170 is completely removed and may be replaced with a simple threaded plug (not shown). In this manner, the potential for undesired friction or seizing caused by the guide rod 170 is eliminated. Additionally, it becomes unnecessary to cover and protect the otherwise exposed end of a dynamic guide rod, such as may be the case with guide rod 166 shown in Fig. 5b.